

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Jong-Yoon CHUN	Confirmation No.:	7873
Serial No.:	10/578,521	Art Unit:	1645
Filed:	May 8, 2006	Examiner:	Not yet assigned
Customer No.:	21559		
Title:	Method for Amplifying Unknown DNA Sequence Adjacent to Known Sequence		

Mail Stop PCT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

REPLY TO NOTICE TO COMPLY WITH REQUIREMENTS  
FOR PATENT APPLICATIONS CONTAINING  
NUCLEOTIDE AND/OR AMINO ACID SEQUENCE DISCLOSURES

In reply to the Notice to Comply with Requirements for Patent Applications Containing Nucleotide and/or Amino Acid Sequence Disclosures that was mailed in connection with the above-captioned application on December 26, 2006, applicant submits the following:

A substitute paper copy of the Sequence Listing.

A substitute copy of the Sequence Listing in computer readable form.

A statement that the contents of the paper and computer readable forms of the Sequence Listing are the same as one another and contain no new matter.

If there are any charges or any credits, please apply them to Deposit Account No.

03-2095.

Respectfully submitted,

Date: February 23, 2007

Susan M. Michaud  
Susan M. Michaud, Ph.D.  
Reg. No. 42,885

Clark & Elbing LLP  
101 Federal Street  
Boston, MA 02110  
Telephone: 617-428-0200  
Facsimile: 617-428-7045



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1459  
Alexandria, Virginia 22313-1450  
www.uspto.gov

U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
10/578,521	Jong-Yoon Chun	50413015001

21559  
CLARK & ELBING LLP  
101 FEDERAL STREET  
BOSTON, MA 02110

ACTION DUE Not Comply-S.L  
DUE DATE 2-26-2007  
ESP 6-26-2007  
INITIALS JM

INTERNATIONAL APPLICATION NO.	
PCT/KR03/02407	
I.A. FILING DATE	PRIORITY DATE
11/10/2003	

CONFIRMATION NO. 7873  
371 FORMALITIES LETTER



\*OC00000021732495\*

Date Mailed: 12/26/2006

## NOTIFICATION TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE AND/OR AMINO ACID SEQUENCE DISCLOSURES

Applicant is given **TWO MONTHS FROM THE DATE OF THIS NOTICE** within which to file the items indicated below to avoid abandonment. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

- The paper or compact disc copy of the "Sequence Listing" is not the same as the computer readable form of the "Sequence Listing" as required by 37 CFR 1.821(e). Applicant must provide a substitute paper or compact disc copy of the "Sequence Listing", **as well as an amendment specifically directing its entry into the application** OR a substitute computer readable form (CRF) copy of the "Sequence Listing". These two items must be the same. Applicant must also provide a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d). If the effective filing date is on or after September 8, 2000, see the final rulemaking notice published in the Federal Register at 65 FR 54604 (September 8, 2000) and 1238 OG 145 (September 19, 2000).

Applicant is cautioned that correction of the above items may cause the specification and drawings page count to exceed 100 pages. If the specification and drawings exceed 100 pages, applicant will need to submit the required application size fee.

For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:

- For Rules Interpretation, call (571) 272-0951
- For Patentin Software Program Help, call Patent EBC at 1-866-217-9197 or directly at 703-305-3028 / 703-308-6845 between the hours of 6 a.m. and 12 midnight, Monday through Friday, EST.
- Send e-mail correspondence for Patentin Software Program Help @ [ebc@uspto.gov](mailto:ebc@uspto.gov)

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

Registered users of EFS-Web may alternatively submit their reply to this notice via EFS-Web.  
<https://portal.uspto.gov/authenticate/AuthenticateUserLocalEPF.html>

For more information about EFS-Web please call the USPTO Electronic Business Center at 1-866-217-9197 or

visit our website at <http://www.uspto.gov/ebc>.

**If you are not using EFS-Web to submit your reply, you must include a copy of this notice.**

PAULETTE R KIDWELL

Telephone: (703) 308-9140 EXT 216

PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/578,521	PCT/KR03/02407	50413015001

FORM PCT/DO/EO/922 (371 Formalities Notice)

**STIC Biotechnology Systems Branch**

**RAW SEQUENCE LISTING**

**ERROR REPORT**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:

Source:

Date Processed by STIC:

10/578, S21  
JFubP  
5-17-06

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 4.4.0 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/efc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):  
U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/10/06

# Best Available Copy

## Raw Sequence Listing Error Summary

### ERROR DETECTED

### SUGGESTED CORRECTION

### SERIAL NUMBER:

10578,521

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics  
Wrapped Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 Misaligned Amino  
Numbering The numbering under each 5<sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4 Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 Variable Length Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 PatentIn 2.0  
"bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s). Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7 Skipped Sequences  
(OLD RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:  
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
(i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
This sequence is intentionally skipped  
  
Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8 Skipped Sequences  
(NEW RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence.  
<210> sequence id number  
<400> sequence id number  
000
- 9 Use of n's or Xaa's  
(NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.  
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10 Invalid <213>  
Response Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11 Use of <220>  
Response Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.  
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 PatentIn 2.0  
"bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 Misuse of n/Xaa "n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid

## Best Available Copy



IFWP

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/578,521

DATE: 05/17/2006

TIME: 10:12:56

Input Set : A:\50413.015001.txt

Output Set: N:\CRF4\05172006\J578521.raw

3 <110> APPLICANT: Chun, Jong-Yoon  
 5 <120> TITLE OF INVENTION: Method for Amplifying Unknown DNA Sequence Adjacent to Known  
 6 Sequence  
 8 <130> FILE REFERENCE: 50413/015001  
 C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/578,521  
 C--> 10 <141> CURRENT FILING DATE: 2006-05-08  
 10 <150> PRIOR APPLICATION NUMBER: PCT/KR2003/002407  
 11 <151> PRIOR FILING DATE: 2003-11-10  
 13 <160> NUMBER OF SEQ ID NOS: 28  
 15 <170> SOFTWARE: PatentIn version 3.3  
 17 <210> SEQ ID NO: 1  
 18 <211> LENGTH: 33  
 19 <212> TYPE: DNA  
 20 <213> ORGANISM: Artificial Sequence  
 22 <220> FEATURE:  
 23 <223> OTHER INFORMATION: DW-ACPI-A  
 26 <220> FEATURE:  
 27 <221> NAME/KEY: misc\_feature  
 28 <222> LOCATION: (22)..(28)  
 29 <223> OTHER INFORMATION: n denotes deoxyinosine  
 31 <400> SEQUENCE: 1  
 W--> 32 tcacagaagt atgccaagcg annnnnnnnag gtc  
 35 <210> SEQ ID NO: 2  
 36 <211> LENGTH: 33  
 37 <212> TYPE: DNA  
 38 <213> ORGANISM: Artificial Sequence  
 40 <220> FEATURE:  
 41 <223> OTHER INFORMATION: DW-ACPI-C  
 44 <220> FEATURE:  
 45 <221> NAME/KEY: misc\_feature  
 46 <222> LOCATION: (22)..(28)  
 47 <223> OTHER INFORMATION: n denotes deoxyinosine  
 49 <400> SEQUENCE: 2  
 W--> 50 tcacagaagt atgccaagcg annnnnnnnag gtc  
 53 <210> SEQ ID NO: 3  
 54 <211> LENGTH: 33  
 55 <212> TYPE: DNA  
 56 <213> ORGANISM: Artificial Sequence  
 58 <220> FEATURE:  
 59 <223> OTHER INFORMATION: DW-ACPI-T  
 62 <220> FEATURE:  
 63 <221> NAME/KEY: misc\_feature  
 64 <222> LOCATION: (22)..(28)

Does Not Contain  
 Corrected Diskette Needed  
 (Pg. 1-5)  
 PLS explain source of genetic material.  
 Invalid Response

33  
 PLS explain source of genetic material  
 Invalid Response

Same error

See item #11  
 on error summary sheet  
 5/17/2006

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RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/578,521

DATE: 05/17/2006  
TIME: 10:12:56

Input Set : A:\50413.015001.txt  
Output Set: N:\CRF4\05172006\J578521.raw

65 <223> OTHER INFORMATION: n denotes deoxyinosine  
67 <400> SEQUENCE: 3  
W--> 68 tcacagaagt atgccaagcg annnnnnnntg gtc  
71 <210> SEQ ID NO: 4  
72 <211> LENGTH: 33  
73 <212> TYPE: DNA  
74 <213> ORGANISM: Artificial Sequence  
76 <220> FEATURE:  
77 <223> OTHER INFORMATION: DW-ACP1-G  
80 <220> FEATURE:  
81 <221> NAME/KEY: misc\_feature  
82 <222> LOCATION: (22)..(28)  
83 <223> OTHER INFORMATION: n denotes deoxyinosine  
85 <400> SEQUENCE: 4  
W--> 86 tcacagaagt atgccaagcg annnnnnnngg gtc  
89 <210> SEQ ID NO: 5  
90 <211> LENGTH: 33  
91 <212> TYPE: DNA  
92 <213> ORGANISM: Artificial Sequence  
94 <220> FEATURE:  
95 <223> OTHER INFORMATION: DW-ACP-2  
98 <220> FEATURE:  
99 <221> NAME/KEY: misc\_feature  
100 <222> LOCATION: (26)..(29)  
101 <223> OTHER INFORMATION: n denotes deoxyinosine  
103 <400> SEQUENCE: 5  
W--> 104 tcacagaagt atgccaagcg agggggnnnng gtc  
107 <210> SEQ ID NO: 6  
108 <211> LENGTH: 33  
109 <212> TYPE: DNA  
110 <213> ORGANISM: Artificial Sequence  
112 <220> FEATURE:  
113 <223> OTHER INFORMATION: DW-ACP2-NA  
116 <220> FEATURE:  
117 <221> NAME/KEY: misc\_feature  
118 <222> LOCATION: (26)..(28)  
119 <223> OTHER INFORMATION: n denotes deoxyinosine  
121 <400> SEQUENCE: 6  
W--> 122 tcacagaagt atgccaagcg agggggnnnag gtc  
125 <210> SEQ ID NO: 7  
126 <211> LENGTH: 33  
127 <212> TYPE: DNA  
128 <213> ORGANISM: Artificial Sequence  
130 <220> FEATURE:  
131 <223> OTHER INFORMATION: DW-ACP2-NC  
134 <220> FEATURE:  
135 <221> NAME/KEY: misc\_feature  
136 <222> LOCATION: (26)..(28)  
137 <223> OTHER INFORMATION: n denotes deoxyinosine

Same errors

See item  
# 11 on  
error  
Summary  
Sheet.



# Best Available Copy

Page 3 of 8

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/578,521

DATE: 05/17/2006  
TIME: 10:12:56

Input Set : A:\50413.015001.txt  
Output Set: N:\CRF4\05172006\J578521.raw

← Same errors

139 <400> SEQUENCE: 7  
W--> 140 tcacagaagt atgccaagcg agggggnnncg gtc 33  
143 <210> SEQ ID NO: 8  
144 <211> LENGTH: 33  
145 <212> TYPE: DNA  
146 <213> ORGANISM: Artificial Sequence  
148 <220> FEATURE:  
149 <223> OTHER INFORMATION: DW-ACP2-NT  
152 <220> FEATURE:  
153 <221> NAME/KEY: misc\_feature  
154 <222> LOCATION: (26)..(28)  
155 <223> OTHER INFORMATION: n denotes deoxyinosine  
157 <400> SEQUENCE: 8  
W--> 158 tcacagaagt atgccaagcg agggggnntg gtc 33  
161 <210> SEQ ID NO: 9  
162 <211> LENGTH: 33  
163 <212> TYPE: DNA  
164 <213> ORGANISM: Artificial Sequence  
166 <220> FEATURE:  
167 <223> OTHER INFORMATION: DW-ACP2-NG  
170 <220> FEATURE:  
171 <221> NAME/KEY: misc\_feature  
172 <222> LOCATION: (26)..(28)  
173 <223> OTHER INFORMATION: n denotes deoxyinosine  
175 <400> SEQUENCE: 9  
W--> 176 tcacagaagt atgccaagcg agggggnnngg gtc 33  
179 <210> SEQ ID NO: 10  
180 <211> LENGTH: 33  
181 <212> TYPE: DNA  
182 <213> ORGANISM: Artificial Sequence  
184 <220> FEATURE:  
185 <223> OTHER INFORMATION: DW-ACP3-N1  
188 <220> FEATURE:  
189 <221> NAME/KEY: misc\_feature  
190 <222> LOCATION: (22)..(25)  
191 <223> OTHER INFORMATION: n denotes deoxyinosine  
193 <400> SEQUENCE: 10  
W--> 194 tcacagaagt atgccaagcg annnnggggg gtc 33  
197 <210> SEQ ID NO: 11  
198 <211> LENGTH: 33  
199 <212> TYPE: DNA  
200 <213> ORGANISM: Artificial Sequence  
202 <220> FEATURE:  
203 <223> OTHER INFORMATION: DW-ACP3-N2  
206 <220> FEATURE:  
207 <221> NAME/KEY: misc\_feature  
208 <222> LOCATION: (23)..(26)  
209 <223> OTHER INFORMATION: n denotes deoxyinosine  
211 <400> SEQUENCE: 11

## Best Available Copy

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/10/578,521

DATE: 05/17/2006  
 TIME: 10:12:56

Input Set : A:\50413.015001.txt  
 Output Set: N:\CRF4\05172006\J578521.raw

W--> 212 tcacagaagt atgccaagcg agnnnnngggg gtc  
 215 <210> SEQ ID NO: 12  
 216 <211> LENGTH: 33  
 217 <212> TYPE: DNA  
 218 <213> ORGANISM: Artificial Sequence  
 220 <220> FEATURE:  
 221 <223> OTHER INFORMATION: DW-ACP3-N3  
 224 <220> FEATURE:  
 225 <221> NAME/KEY: misc\_feature  
 226 <222> LOCATION: (24)..(27)  
 227 <223> OTHER INFORMATION: n denotes deoxyinosine  
 229 <400> SEQUENCE: 12

W--> 230 tcacagaagt atgccaagcg agnnnnngggg gtc 33  
 233 <210> SEQ ID NO: 13  
 234 <211> LENGTH: 20  
 235 <212> TYPE: DNA  
 236 <213> ORGANISM: Artificial Sequence  
 238 <220> FEATURE:  
 239 <223> OTHER INFORMATION: Nested DW-P3-N  
 241 <400> SEQUENCE: 13  
 242 ccaagcgagg gggggggggtc 20  
 245 <210> SEQ ID NO: 14  
 246 <211> LENGTH: 29  
 247 <212> TYPE: DNA  
 248 <213> ORGANISM: Artificial Sequence  
 250 <220> FEATURE:  
 251 <223> OTHER INFORMATION: DW-P1-A  
 254 <220> FEATURE:  
 255 <221> NAME/KEY: misc\_feature  
 256 <222> LOCATION: (22)..(24)  
 257 <223> OTHER INFORMATION: n is any base  
 259 <400> SEQUENCE: 14

W--> 260 tcacagaagt atgccaagcg annnaggtc 29  
 263 <210> SEQ ID NO: 15  
 264 <211> LENGTH: 29  
 265 <212> TYPE: DNA  
 266 <213> ORGANISM: Artificial Sequence  
 268 <220> FEATURE:  
 269 <223> OTHER INFORMATION: DW-P1-C  
 272 <220> FEATURE:  
 273 <221> NAME/KEY: misc\_feature  
 274 <222> LOCATION: (22)..(24)  
 275 <223> OTHER INFORMATION: n is any base  
 277 <400> SEQUENCE: 15

W--> 278 tcacagaagt atgccaagcg annncggtc 29  
 281 <210> SEQ ID NO: 16  
 282 <211> LENGTH: 29  
 283 <212> TYPE: DNA  
 284 <213> ORGANISM: Artificial Sequence

33 Same  
 ERRORS

## Best Available Copy

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/578,521

DATE: 05/17/2006

TIME: 10:12:56

Input Set : A:\50413.015001.txt

Output Set: N:\CRF4\05172006\J578521.raw

286 <220> FEATURE:  
 287 <223> OTHER INFORMATION: DW-P1-T  
 290 <220> FEATURE:  
 291 <221> NAME/KEY: misc\_feature  
 292 <222> LOCATION: (22)..(24)  
 293 <223> OTHER INFORMATION: n is any base  
 295 <400> SEQUENCE: 16  
 W--> 296 tcacagaagt atgccaagcg annntgggc  
 299 <210> SEQ ID NO: 17  
 300 <211> LENGTH: 29  
 301 <212> TYPE: DNA  
 302 <213> ORGANISM: Artificial Sequence  
 304 <220> FEATURE:  
 305 <223> OTHER INFORMATION: DW-P1-G  
 308 <220> FEATURE:  
 309 <221> NAME/KEY: misc\_feature  
 310 <222> LOCATION: (22)..(24)  
 311 <223> OTHER INFORMATION: n is any base  
 313 <400> SEQUENCE: 17  
 W--> 314 tcacagaagt atgccaagcg annnggggc  
 317 <210> SEQ ID NO: 18  
 318 <211> LENGTH: 29  
 319 <212> TYPE: DNA  
 320 <213> ORGANISM: Artificial Sequence  
 322 <220> FEATURE:  
 323 <223> OTHER INFORMATION: DW-P1  
 326 <220> FEATURE:  
 327 <221> NAME/KEY: misc\_feature  
 328 <222> LOCATION: (22)..(25)  
 329 <223> OTHER INFORMATION: n is any base  
 331 <400> SEQUENCE: 18  
 W--> 332 tcacagaagt atgccaagcg annnnnggc  
 335 <210> SEQ ID NO: 19  
 336 <211> LENGTH: 21  
 337 <212> TYPE: DNA  
 338 <213> ORGANISM: Artificial Sequence  
 340 <220> FEATURE:  
 341 <223> OTHER INFORMATION: JYC3  
 343 <400> SEQUENCE: 19  
 344 tcacagaagt atgccaagcg a  
 347 <210> SEQ ID NO: 20  
 348 <211> LENGTH: 20  
 349 <212> TYPE: DNA  
 350 <213> ORGANISM: Artificial Sequence  
 352 <220> FEATURE:  
 353 <223> OTHER INFORMATION: mTNFa-C1  
 355 <400> SEQUENCE: 20  
 356 caccttgccc tgcccattag  
 359 <210> SEQ ID NO: 21

← Same  
errors

29

See item  
29 # 11 on  
error  
summary  
sheet,

29

21

20

The type of errors shown exist throughout  
the Sequence Listing. Please check subsequent  
sequences for similar errors.

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RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/578,521

DATE: 05/17/2006  
TIME: 10:12:57

Input Set : A:\50413.015001.txt  
Output Set: N:\CRF4\05172006\J578521.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 22,23,24,25,26,27,28 ✓  
Seq#:2; N Pos. 22,23,24,25,26,27,28 ✓  
Seq#:3; N Pos. 22,23,24,25,26,27,28 ✓  
Seq#:4; N Pos. 22,23,24,25,26,27,28 ✓  
Seq#:5; N Pos. 26,27,28,29 ✓  
Seq#:6; N Pos. 26,27,28 ✓  
Seq#:7; N Pos. 26,27,28 ✓  
Seq#:8; N Pos. 26,27,28 ✓  
Seq#:9; N Pos. 26,27,28 ✓  
Seq#:10; N Pos. 22,23,24,25 ✓  
Seq#:11; N Pos. 23,24,25,26 ✓  
Seq#:12; N Pos. 24,25,26,27 ✓  
Seq#:14; N Pos. 22,23,24 ✓  
Seq#:15; N Pos. 22,23,24 ✓  
Seq#:16; N Pos. 22,23,24 ✓  
Seq#:17; N Pos. 22,23,24 ✓  
Seq#:18; N Pos. 22,23,24,25 ✓  
Seq#:28; N Pos. 1,2,3,4,5,6 ✓

# Best Available Copy

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## VERIFICATION SUMMARY

PATENT APPLICATION: US/10/578,521

DATE: 05/17/2006

TIME: 10:12:57

Input Set : A:\50413.015001.txt

Output Set: N:\CRF4\05172006\J578521.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application No  
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:32 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0  
L:50 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0  
L:68 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0  
L:86 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0  
L:104 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0  
L:122 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0  
L:140 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0  
L:158 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0  
L:176 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0  
L:194 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0  
L:212 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0  
L:230 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0  
L:260 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0  
L:278 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0  
L:296 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0  
L:314 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0  
L:332 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0  
L:458 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0